



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,283	12/04/2003	Mark Kingston Jennings	65857-0118	7159
10291	7590	08/04/2005	EXAMINER	
RADER, FISHMAN & GRAUER PLLC 39533 WOODWARD AVENUE SUITE 140 BLOOMFIELD HILLS, MI 48304-0610			LORENCE, RICHARD M	
		ART UNIT	PAPER NUMBER	
		3681		

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/728,283	JENNINGS, MARK KINGSTON
	Examiner Richard M. Lorence	Art Unit 3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 June 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date. _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

This action is in response to the amendment filed on June 21, 2005. The specification and claims 1, 5, 9, 10, 15, 17, 19 and 20 have been amended. Claims 1-20 remain pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. It is not seen where the originally filed disclosure provides support for the newly added limitation in each of claims 1, 9, 10 and 17 which recites that "an outward force applied to said retention flange is transmitted through said retention flange and bypasses a corresponding support shaft".

Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 17 recites the limitation "said retention flange" in line 9. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

Claims 10, 12, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by McAdams et al. '100 which discloses a clutch release yoke 31 which, as best seen in Figure 2, includes a plurality of fork sections 33 extending from a bridge section mounted on the shaft 32. Bearing elements 34 are mounted on respective support shafts attached to the forks. As can be clearly seen in the figure the bearing support shafts are formed by threaded bolts, the heads of which form retention flanges for retaining the bearing elements in position. The retention flanges are located opposite to the inboard side of the forks. The bearings roll in the groove 35 and as such are roller bearings.

***Claim Rejections - 35 USC § 103***

Claims 13-15 are further rejected under 35 U.S.C. 103(a) as being unpatentable over McAdams et al. '100 in view of Spase '621.

Spase discloses a clutch release yoke 32 similar to that shown in McAdams including anti-friction rollers 35 mounted on the forks 34. As can clearly be seen in each of Figures 1 and 5 the bearing elements of Spase include small diameter rolling

elements and are accordingly needle bearings.

While McAdams apparently shows a bearing element in the form of an annular sleeve mounted to the forks, it is believed that one having ordinary skill in the art at the time the invention was made would recognize that by mounting the bearing elements on the forks via a roller or needle bearing the amount of friction generated between the bearing element and the support shaft would be reduced leading to the desirable result of decreased wear.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lepard et al. '181 in view of McAdams et al. '100.

The '181 patent to Lepard discloses a clutch assembly in Figure 3 including a flywheel 20, transmission input shaft 24, cover 18, pressure plate 28, driven disc 26, release sleeve 32, levers 30, spring 40 and release bearing 15 as set forth in claim 1. The clutch assembly of Lepard further includes the clutch housing 10 (see Figure 8) in which the release shaft 46 is pivotally disposed, the yoke 12 having fork arms 52 extending from bridge section 50, and the bearing elements 70 rotatably mounted on support shafts 74 attached to inboard ends of the fork arms. Regarding claims 2, 11 and 19, note Figure 7 of Lepard et al. which shows the snap ring 86 disposed in the grooves 83, 84. Lepard does not show the claimed retention flange.

As discussed hereinabove, McAdams et al. '100 discloses a clutch release yoke 31 which includes a plurality of fork sections 33 extending from a bridge section mounted on the shaft 32. Bearing elements 34 (equivalent to Lepard's bearing

elements 70) are mounted on respective support shafts attached to the forks. The bearing support shafts are formed by threaded bolts, the heads of which form retention flanges for retaining the bearings elements in position. The retention flanges are located opposite to the inboard side of the forks.

Since Lepard et al. and McAdams et al. are both from the same field of endeavor, one having ordinary skill in the art would recognize that the rollers 70 of Lepard could be mounted to the fork arms of the yoke in the manner shown by McAdams et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to mount the rollers 70 of Lepard to the fork arms of the yoke in the manner shown by McAdams et al. in order to obviate the need for the specialized tool 92 required in the assembly of Lepard's device, since the threaded nut and bolt employed by McAdams et al. require only tools such as wrenches and screwdrivers which are commonly found in the toolbox of most any mechanic.

#### ***Response to Arguments***

Applicant's arguments filed June 21, 2005 have been fully considered but they are not persuasive.

Regarding the rejection of claims 10 and 17 as being anticipated by McAdams et al. applicant argues that "McAdams does not teach, suggest, or contemplate having the bearing support shaft attached to an interior surface of an opening in the fork as claimed". However this limitation, while present in claim 17 does not appear in claim 10.

Applicant further argues that "McAdam's teachings do not contemplate protecting the bearing element from undesirable end loading". Inasmuch as the protection of the bearing from undesirable end loading results from having a retention flange on the bearing support shaft it is believed that this limitation is inherently present in the device of McAdams where the head of the bolt is equivalent to applicant's retention flange.

Regarding the rejection of claims 13-15 as being unpatentable over McAdams et al. '100 in view of Spase '621 applicant apparently does not agree that Spase shows the bearing element in the form of a roller or needle bearing. The examiner believes that the showing in Figure 1 taken along with the description of the roller as an "anti-friction roller" (page 2, left-hand column, lines 9-10) would suggest to one having ordinary skill in the art that the roller 35 is mounted on the yoke via rolling elements. As to claim 13 the head of McAdams' bolt is clearly shown to substantially cover the end of the bearing element.

Regarding the rejection of claims 1-16 as being unpatentable over Lepard et al. '181 in view of McAdams et al. '100 applicant argues that "McAdam's teachings do not contemplate protecting the bearing element from undesirable end loading". Inasmuch as the protection of the bearing from undesirable end loading results from having a retention flange on the bearing support shaft it is believed that this limitation is inherently present in the device of McAdams where the head of the bolt is equivalent to applicant's retention flange.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (571) 272-7094. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard M. Lorence  
Primary Examiner  
Art Unit 3681

Lorence/rml